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PUBLISHER'S NOTICES.

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The Report of the Ohio State Board of Agriculture, is in course of preparation, and will probably be presented to the Legislature some time during the present month.

Acknowledgments.

We tender our best thanks to the numerous friends who have so nobly exerted themselves (in spite of mud and rain) during the past month, to renew and extend our list of subscribers. We hope they will continue their efforts, and that many, if not *all*, of our old friends will soon give us the pleasure of entering their names, along with many new ones upon our list for 1849.

☞ A little effort by each one, at this favorable season, would soon double the number of our subscribers and give a new impulse to the cause of improvement throughout the State. Shall it not be done?

New Year's Greeting.

Once More kind friends and patrons, we are permitted to greet you with the compliments of the season, and our best wishes for your happiness and prosperity. May Heaven's blessings attend you, in all your labors during the year upon which we have entered; and may we all as friends and fellow laborers rejoice together at its close in the retrospect of well directed efforts for intellectual and moral improvement, and the benefit of our fellow men. In this age of progress and activity, mental as well as physical indolence is a crime, of which no one claiming to be a *man* and especially an *American*, should be guilty. Happy will it be for the *farmers of Ohio*, when all of them shall become sensible of their high duties and privileges. Let us be thankful that some minds are becoming awakened on this subject, and take courage to persevere in endeavors to awaken others.

Letter from D. Lapham.

Crops of the past season—use of Plaster—Cut-worms—planting corn—Hussey's Reaping Machine—cutting corn by horse-power—Wheat drill.

M. B. Bateham—*Dear Sir:*—Being on a visit of a few weeks at home, I propose to give you a sketch of our farming operations, at Mount Tabor during the past season.

The season upon the whole has been quite favorable for the growth and perfection of all the usual products of the farm in this latitude. The wheat crop has yielded above an average product, both in quantity and quality. Of corn, there has been a fair average crop. Potatoes were hardly equal to the average. Apples have been plenty and of good quality. Grapes ripened very well with us, and were but slightly affected with mildew. Peaches were abundant on elevated situations, but no trees bore on low lands. Last year it was just the reverse. The trees on low grounds and in the valleys bore fruit, but the fruit was killed on the hills and high grounds. It would be well to have a committee of your Horticultural Society to investigate the subject of the effects of atmospheric changes upon the peach trees, in different situations

and localities. By the use of plaster we have had an abundant yield of clover. And I flatter myself with the idea that my example, and my article in the Cultivator on the use of plaster have been the means of inducing several of my neighbors to make use of it on their clover. The cut worms destroyed 25 acres of clover which was intended for pasture. They took every stalk of clover and grass leaving the field as bare as if it had been plowed. They also destroyed a field of corn of 25 acres, planted on a wheat stubble. This field was subsequently plowed and sown in oats which was turned under in the fall as a manure for the wheat crop now in the ground. Upon one half of this field one bushel of plaster to the acre was sown before the oats were plowed in, upon the other half one half bushel per acre was sown. The clover field which the worms had stripped was plowed up and planted in corn with our improved corn drill, after the worms had entered the *pupa* state and had ceased to feed. By using a variety of corn which matures early we have had a very excellent crop of corn from this field. After the corn was up and required working the field was furrowed croswise of the drills four feet apart, and all such stalks as came in the way was plowed up. We found no difficulty in keeping the corn free of weeds. On mentioning the success we had had with this mode of raising corn to Mr. T. C. Peters of Buffalo, whilst at the Fair at Xenia last fall, he declared that this one idea of planting with a drill and furrowing out after the corn was up was worth to him the cost of his trip to Ohio and back.

We have used one of Hussey's Reapers during the last havest; and we are well satisfied with its performance, having cut our own wheat, some 50 acres, as well as about 150 acres for our neighbors. We have made a slight improvement in this machine to obviate a difficulty which occured, by the falling of considerable wheat, after it was cut, over the edge of the machine, which was next to the standing grain. The upright edge of the machine on that side was lengthened and made higher; and this improvement caused all the grain which was cut to fall upon the platform.

But the great discovery we have made is that this machine is worth its cost for the purpose of cutting up corn. We used the machine to cut some 10 or 15 acres, when we had the misfortune to break a knife by running against a dry hickory stub, too large and too hard for the knives to cut. To adapt this machine to cutting corn it only requires the platform to be made wider so as to hold the stalks of corn, and prevent their falling off; which is done by one piece of board about 15 inches wide nailed to cleats on the back part of the platform, and which can be easily removed when it is wanted to cut wheat.

We think this discovery is of great importance, especially in such districts as make a practice of cutting up corn to sow wheat or to save for fodder. It requires a man to ride on the machine, with a small rod like the handle of a rake to throw the corn on the platform as fast as it is cut. When the platform becomes loaded with stalks, the team is stopped and they are drawn off the platform by hand. And it is easy to leave the corn lying in straight rows across the field by a little attention in stopping at the right place to unload, and it can then be put up in shocks, in the usual manner. Two horses are amply sufficient to drive the machine, as it will cut but one row of corn at once. A boy to drive, and one man to ride on the machine, and to unload it, complete the equipment for cutting up corn. And this force will cut 10 or 12 acres a day.

We have also procured one of Gatlin's wheat drills; but we have not yet sufficiently tested its qualities to enable us to give an opinion upon it. One thing, however, is very apparent, that in order to use this machine properly, it will require very *clean farming*. If the machine should affect an improvement in this respect only, a very great advantage will result from it, to the country.

Respectfully, D. Lapham.

Mount Tabor, Champaign Co., Dec. 16, 1848.

Rather Tough—that Diving Pig story on next page.—Did "M." hold a watch while the pigs staid under water?

"Fertilizing Power of Shade"--New Theory of Manures--Summer Fallows, &c.

M. B. Bateham, Esq:—In a late number of your paper, I notice an article from the pen of Robert T. Baldwin, of Winchester, Va., copied from the Plow, Loom and Anvil. The article referred to is headed "Fertilizing Power," &c., and is introduced by Mr. Skinner into his paper, with some very flattering remarks. I find moreover, it is attracting some attention from our country papers, having been copied into several.

My object in calling attention to the article, is not to dispute the general and well known fact, stated by Mr. Baldwin; nor so much to guard the agricultural community from hastily adopting a theory, that may lead them to neglect their laystalls and Lime kilns, as to promote investigation and experiment. Let me quote from the article.

"The astonishing fertilizing effect of vegetable matters, when strictly covering the surface of the earth for a length of time, cannot be accounted for by their decomposition; for the quantity of the residue of clover, leaves, or straw, would not be sufficient, even if it were always equal in virtue to the best Peruvian guano. Straw spread thickly over the *poorest* land—land *completely exhausted of alkalines*—will enrich it, by the time it is decomposed, when ten times the quantity plowed under, will produce no perceptible benefit. If the manure of straw be owing to the six per cent of phosphate of lime, which it contains, why is it that sixty per cent plowed in the earth, imparts no fertility to it? But that the fertility of the earth is not attributable to the decomposition of the straw is proved by the fact, that any substance, incapable of decomposition will produce precisely the same effect. I do not entertain a doubt that the wonderful fertilizing effect of all the substances covering the face of the earth for some time, is to be attributable to *shade* and *shade only*, and that the degree of fertility imparted to the soil may always be estimated by the density and duration of the shade; and again that it can be most profitably employed by the farmer, in fertilizing the surface of the earth. I know from experience, for lands densely shaded one year, with any substance whatever, will *always* prove to be more *durably* enriched, than lands manured."

It would appear from the above quotation that Mr. Baldwin is of opinion that the practice of manuring lands may safely, and profitably be abandoned, whenever suitable material can be obtained for covering the surface of the earth, and sure the land can be spared for one year.

It is not my purpose to attack Mr. B's. theory, but to offer some suggestions and facts that may tend to sustain it: indeed I have for several years been acting upon a system of my own, very like, if not identical with his; the only essential point of difference that now strikes me, is, that I still regard the *manure heap* as an important auxiliary to the labors of the farmer, whilst Mr. B. dispenses with it altogether.

It may not be out of place here, to state the accidental circumstances that first drew my attention to this matter. In the fall of 1838, when the morus multicaulis fever was at its height in the Eastern States, and when strong symptoms of the infection were manifest, even in Ohio, in writing to a gentleman in Baltimore on the all engrossing subject of the day, I offered, in a bantering way to appropriate a few acres to the cultivation of the tree, for the Western market, provided it could be done without any other expense or risk to myself, than the loss of time, labor, and use of the land. The next mail brought me an answer with assurances that the trees would be forwarded in time for spring planting. Accordingly in the spring of 1839, the trees came on and I planted them.—The field in which I made my Multicaulis experiment, was brought under the plow in 1835, and was cultivated in corn four years successively previous to 1839. It lay in an oblong square, the greatest length East and West; and contained 42 acres.

Being desirous of a rapid growth, I selected for the Multicaulis cuttings the best portions of the field, as indicated by previous cropping, ten acres on the west end

I planted in corn: next east twelve acres multicaulis; next east, 10 acres of corn; next east, ten acres multicaulis. Previous to planting, the ground was put in fine order by repeated harrowing, and worked constantly with double shovel plows, and hoes, from the latter part of May until the last of August, for the purpose of keeping down weeds and promoting the growth of the young trees, so that a new portion of the soil was exposed to the action of the sun every few days, for nearly three months. The season proved the driest known in Ohio for thirty years, consequently the growth of the trees was very slow, few reaching a greater height than two feet; and being planted full four feet apart, afforded no shade to the grouud whatever.

In the ensuing spring of 1840, two brothers living near me, rented the field for a corn crop, the elder, to the no small chagrin of his younger brother—having his choice, selected the multicaulis ground, which being entirely free from weeds, promised and easy and profitable summer's work. The corn was put in, in good time, in good order, and was well tended by both brothers. The season proved highly favorable, and from the multicaulis ground—22 acres, my rent, one-third, was 176 bushels, from the younger brother—20 acres, my rent, one-third, was 440 bushels. The yield per acre on the multicaulis ground being 24 bushels to the acre, on the corn stalk, 66 bushels to the acre. This astonishing difference in the yield of corn led me to seek the cause. The only satisfactory one I could hit upon was, that the constant working of the ground, under a hot sun, caused it to part with, by evaporation, a greater quantity of fertilizing gaseous matter than would have been consumed in ordinary tillage, in many years; and I may here add, that the land up to this time—though generously treated, has not entirely recovered its former fertility.

From the foregoing and other corroborating facts that have come under my notice, I was led to believe that protection from the sun, if not essential, was very material to the fertility of the soil. Acting under this belief I am careful not to pasture my grounds too closely, especially those fields that come into grain culture, in their regular course. My practice is to turn about as much stock on a clover field, as will be sufficient to eat off about one-third of the grass, the rest to be trodden down, and finally plowed in. When a meadow becomes "hide bound," so that the yield of hay is sensibly falling off, one crop suffered to grow, and rot on the ground uncut, I find better than to plow and reset.

My theory is, that by keeping a good coat of grass on the ground, especially from June to October, you prevent to a great extent, the escape by evaporation, of the fertilizing agents therein contained, and where you apply a covering to the ground, in addition to its natural covering of grass, with a view to enriching any particular spot, you not only secure what fertilizing agents are present, but you greatly increase their diffusion, and activity.

It is a well known fact, that any substance, such as hay, straw, weeds, brush, or even a bit of old carpet or plank, laid upon the ground for any length of time, will loosen up the soil, so that a stick may be thrust into it several times the depth that it can be, beyond where such covering lies, and this condition of the ground, no matter how produced, constitutes its fertility. But the question is, what produces this disintegration or repulsion, so favorable to vegetable growth? Can Electricity have any thing to do with it? or is it wholly owing to chemical changes, brought about by the continued action of heat and moisture under peculiar and favorable circumstances? I incline to the opinion that a covering of chaff, hay, or straw,—I put them in their order of value for the purpose, in proportion to its density, keeps up a perpetual heat and moisture about the suface of the ground, which evolves, expands and diffuses certain fertilizing principles, that have remained there, partially inert, for want of some agent or power to quicken them into life—and being thus acted upon, and expanded, produce this disintegration of the soil, in search of space to accomodate their increased bulk, consequently the more fertilizing matter there is in the soil to be thus acted upon, the greater and more permanent will be the benefits.

But if, as Mr. B. supposes, the effect will be produced in an equal degree, on the poorest, as on the richest lands, I must extend my theory a little, by supposing that this surface covering acts as a great chemical alembic to distil nourishment for the soil it covers. And this I can readily conceive to be the case, if water, air, and other unseen agents can be thus elaborated into vegetable stimulants, and why may they not? Why may not the myriads of animalculæ that inhabit every drop of water, contribute as much, when properly prepared and applied to fertilizing the earth, as other insects, no less Lilliputian do, in building up islands and continents.

Yours, respectfully,

Melville Grave, Dec. 21, '48. SAMUEL KEERER.

REMARKS.—The foregoing communication is one of the most *suggestive* articles we ever remember having published. The facts and suggestions it contains, taken in connection with former articles on this subject, are calculated to excite inquiry and lead to discoveries of the utmost importance to the farmer and the horticulturist—affecting as it does, the whole system of manuring, summer fallowing, &c. We hope this matter will be taken up and investigated thoroughly by scientific and practical minds; and we advise farmers to *think* and *observe* more closely than ever before, but not to adopt hastily any conclusions until fully established. We shall say more on this topic before long.—ED.

The Diving Pigs.

MR. BATEHAM:—I see in your paper of 1st inst., an article copied from the Zoological Journal, speaking of "diving pigs." Your editorial comments show some incredulity upon the subject. A part of the statements there made, I can corroborate to the letter and word.

From a youth until after my majority I was engaged as a superintendant at the Iron works in the neighborhood of the Hanging Rock in this State. Nearly opposite the Hanging Rock, in Greenup county, Kentucky, I attended to the business of Messrs. H. Blake & Co., at their landing on the Ohio. We were almost constantly unloading boat loads of corn brought down the river.—In unloading, ears and quantities of the grain would fall into the river. Much of the corn having lain at the bottom of the boat would become wet and sobby from the bilge water, and portions of it become worthless, consequently would be thrown overboard, when it would sink in several feet water, and from the rise of the river would often be eight and ten feet beneath the water's surface.—We kept about the landing a number of brood hogs, and I have often sit upon the high and grassy banks of the river, and amused myself with witnessing not only the mother, but the pigs wade out into the river and wholly disappear for fifteen or twenty minutes, then would rise again to the surface one, two or three rods from the shore, in six, eight or ten feet of water. They generally came ashore and after remaining for a few minutes eating the ear which they often brought with them, would return again, repeating this as often as a dozen times before they would retire from their aquatic, sport, and I have frequently seen them rise from the bottom to the surface and swim several times round and descend to another part of the bottom, searching (I suppose) for new and richer stores of the precious food. *I do not think any of ours had webbed feet.* Yet we are taught by science to suppose, that in the course of time should the practice be continued by the descending generations, every pig and hog would be supplied by generous nature not only with feet adapted to swiming, but ears, nostrils, mouth and eyes, would be provided with proper protection against injury from the water, &c. As further proof of the sagacity of the hog, I will state that when on my way to Missouri in the spring after the great flood in the

Mississippi, in 1844, I stopped for a few minutes at a small place called Liberty, on the Illinois side of the Mississippi, where an elderly gentleman by the name of Cardozo stated that during the flood houses would frequently pass down the river with hogs in the upper stories, (the house sinking to the second story,) which would spring into the water and swim away to an ear of corn which they would see floating upon the water. He said he not only saw this done by the swinish inhabitants of houses, but many which were floating upon loose bodies of drift wood, as soon as the corn would be secured the hog would again return to his place of refuge. M.

Xenia, Dec. 5, 1848.

United States Census for 1850.

Congress will soon be in session, and petitioned to alter, and it is hoped, persuaded greatly to improve, the law which regulates the decennial census of the United States. This law is defective in many respects. It is our present purpose, however, not to review the whole subject, but to suggest a few improvements in regard to Agricultural Statistics.

What is annually produced in the several States, what consumed and what exported, and how production can be best rewarded and extended, are questions of fact, which deeply concern all classes and all interests in the community. The Agricultural industry of the country is not so productive, nor so well rewarded for the immense amount of labor and of capital devoted to this pursuit, as it should be. Some branches of planting and husbandry are over done; others are sadly neglected, whilst all are susceptible of improvement. To attain the advantages, and realize the improvements within the reach of cultivators in all the States, reliable agricultural statistics, which shall embrace the whole tillage and farming operations of the Union, are indispensable. *Facts* can alone form a safe basis for extending such rural operations as ought to be extended; for promptly curtailing in all cases where excess is likely to ensue; and for embarking in new enterprises, opening up new pursuits, if it be apparent that both public and private interests will be promoted thereby.

Our agricultural statistics have been valueless to the producing and commercial classes, because of the careless and defective manner in which the census was taken. The official tables are known to be incorrect—grossly untrue—in many instances. It is, perhaps, needless to remark, that information which is *false*, and well calculated to mislead the public, by having in some degree the character of the National Government as its backer, is far worse than no information at all. American politicians, who are substantially its law-makers, appear to feel the least possible interest in collecting truthful and reliable statistics, in reference to the great industrial pursuits of a business people. This marked indifference and neglect are not creditable to the statesmanship of our public men. It requires too much hard work to investigate the uninviting science of Statistics for ordinary minds to study the subject, either long or closely. Hence the matter is slurred over by Congress in a way that renders the decennial census of the United States, nearly worthless to the business men of the country.

We have the census returns for 1840 before us. They are defective in not showing the number of acres of improved land in the several States; the quantity in tillage, pasture and meadow; the amount devoted to the production of cotton, corn, sugar-cane, rice, tobacco, hemp, wheat, rye, oats, barley, peas, beans, flax, hops, turnips, millet and garden vegetables. It is desirable to know what is the yield of each crop per acre. By looking over the average products harvested by the best farmers, in different counties and districts, the dull and careless ones would be stimulated to exert themselves and improve their estates. An earnest and general effort to improve the soil and those that direct its culture, is the one great thing now lacking. Let us all know, then, how many acres are required to make the cotton, wheat, corn, &c., grown in the United States; and which counties are doing well and which badly in the culture of any staple. Changes in farming operations are often desirable or necessary.—In behalf of the agriculturists of the country, we ask Congress to furnish us truthful statistics that will shed light on this subject. Our object is to prevent a waste of rural labor, by its mis-direction. The loss to the nation, by the misapplication of so much of its capital and productive industry is immense, as we took some pains to demonstrate in our first agricultural report to the New York Legislature.

Again, the Census Tables are defective in not stating the number of cows milked to produce the quantity of butter and cheese set down as the "Dairy Products" of each district. It is well known that for any given amount of food consumed, some families of cows yield a much larger return than others, in milk, cheese and butter. It is desirable to know in what counties and districts an average of 1,000 cows give the largest yield in dairy products. All sensible farmers who wish to improve the present herds of neat cattle, by a judicious cross on the best milkers in the Union, will then see at a glance where to go and find them. Statistics of this kind, (which only require that the cows milked shall be counted,) will create a demand for improved races of native cattle, and prompt tens of thousands to *study and work* to produce what the country much needs—far more profitable milkers to supply both foreign and domestic markets, with good butter and cheese. We hazard nothing in saying that the cheap and skilful production of these important staples is not generally understood. Taken as a whole, American cows are not what they should be for dairy purposes.

In reference to wool growing and sheep husbandry, the United States census is equally unsatisfactory in its statements. It gives us no information as to the number of sheep shorn or clipped, by which we can estimate the weight of the fleeces in any district or section. In some parts lambs are counted in with adult sheep, and in others not. In some flocks the proportion of lambs is much larger than in others. Hence, the fleeces should be counted as well as their aggregate weight stated. And it would be well to say whether the flock were common, Merino, Saxon, Cotswold or South Down. If there is any pretence of benefitting the great agricultural interest by this census taking, let it be close enough to be worth something after the farmers have got it and paid well for it. Permit a hint, that the *thing* must be paid for, whether it be worth little or much.

We annually import and consume many millions of pounds of wool. This may be wise, and the best possible economy, but the writer don't believe it. There is room for great improvement in the management of sheep and the extension of the wool growing business in this country. In this connection, it would not be amiss to return the number of *dogs* kept in the several States.—It will fill only a single narrow column in the Tables, and present a telling contrast with the column of sheep in some counties. Give us light and truth; it is the beginning of all reformation.

Horses and Mules are returned together, so that no one knows how many of each there is in the country.—This is absurd, for to make the returns worth the reading, the figures should show both the number of horses and of mules in every county and State. Other defects might be pointed out; but enough has been said to call the attention of the Agricultural Press to the subject.—This is our principal object, for the conductors of these journals know the value of full and reliable information in regard to the varied products of American Agriculture.—*Southern Cult.*

Salt for Plum Trees.—The Maine Farmer, says, that P. C. Holmes, of Gardener, had several plum tress planted in a soft clayey loam, which had not borne any fruit for seven or eight years. In the fall of 1844, he strewed a small quantity of salt around the roots, and in 1845, they were full of fruit.

The Osage Orange--Culture of Hedges.

Almost every day, inquiry is made of us for some further information respecting the Osage Orange plant and its culture for hedges; and the continued demand for the seed, shows that many persons are determined to make practical use of the information that has already been given on this subject. So fully convinced are we, that the results will prove highly satisfactory to those who try the experiment of forming hedges of this plant, and that it will prove of great and lasting advantage to the country, we propose again to devote a little space in our columns to the purpose of imparting such information on the subject as seems to be most needed at the present time, including some facts and suggestions not contained in our volume of the past year.

The appearance and character of the plant, was pretty fully described in our last year's volume, page 33. The above cut represents a small branch, with the leaves and thorns. The leaves are of a dark shining green, giving the plant and hedge a most beautiful and healthy appearance, from Spring till late in Autumn; while its numerous strong branches and sharp thorns enable it to form a hedge that is perfectly impassable to man, boy or beast, as is fully shown by specimens of hedge now 10 or 12 years old, in the neighborhoods of Cincinnati and Philadelphia.

The Osage Orange, (*Maclura aurantiaca*) is a native of Arkansas and Texas, abounding particularly in the Red river country. A writer in the Prairie Farmer —G. S. Park, of Missouri—who travelled in that portion of Texas, and brought seed from thence, says of this tree, it is called in that country Bois d'Arc (bo-dark) which, in English, means bow wood. He says:

"It grows in great abundance on the head waters of the Red River, and in the fertile regions that border on the southern termination of the dry sandy plains that lie east of the Rocky Mountains. It is found in the centre of the prairie regions of the continent, and has ever impressed me with the conviction that it is designed by Providence for highly useful purposes. It grows best on dark rich bottom land, but I have seen large trees on clayey, wet land. I have seen some growing on dry, sandy land, and in thickets on the borders of the prairie. Along the wet ravines that run up into the prairie it grows about as high as an apple tree, and the thorny branches spread out wide and nearly reach the ground. It is a more durable wood than cedar. It is very hard, and polishes smooth. The heart would make excellent railroad beams, and would last as long as the iron rails. About 500 cords were exported to France last year. The French dye a beautiful yellow with it. The wood keeps a bright yellow appearance after being exposed to the weather for years. The little twigs are stiff and thorny. The thickets are impregnable. Settlers from the Bois d'Arc country are known by their ragged clothes. The apples are about the size of a quart bowl, look rich, and taste like a raw pumpkin. Horses get fat on them."

Prof. Turner, of Illinois College, who has done much to introduce this kind of hedge into the prairie regions of the West, and has planted it extensively himself, says, "If any one will sit down and draw a description of a hedge plant precisely as he would have it if he were to have one made to order, *to make an impassable hedge in four years*, I will engage to prove to the public that the Osage Orange is in all points as good, and in some points better than even his imagination could wish."

A few of its advantages we will briefly enumerate, referring our readers for further particulars to the several articles on this subject in our last volume.

It is adapted to our climate. For some years it was a matter of doubt whether the plant would withstand the winters of Northern Ohio, New York, &c., but all doubts on this subject are fast giving way. Experiments have shown that it will succeed throughout Ohio, and in Pennsylvania and New York, and even as far north as Boston. A writer in the last number of the Horticulturist, says:

"I am delighted with the Osage Orange, as a hedge plant. When I was in Ohio, a short time since, I saw several miles of this tree, in all stages of hedge growth, from plants six inches high to well grown hedges, measuring seven feet in height. Its beautiful, polished and glossy foliage, and healthy, luxuriant growth attract the eye, even at a distance. In fact, I have never seen any hedge, except one of *holly*, (which does not appear to thrive in the northern states,) so handsome, taken altogether, as the Osage Orange. It is also possessed of most efficient means of *defence*, in its long and sharp thorns; which, though they are somewhat concealed by the leaves, make themselves felt at the least approach of anything "on the attack."

"It is, perhaps, yet a question, precisely how far *north* the Osage Orange will thrive, as a hedge plant,—since it comes originally from Arkansas. I will state, however, that I have seen a neat hedge of this tree in the grounds of John P. Cushing, Esq., near Boston. I understood, while there, that although the Osage Orange, planted out as a *tree*, is not quite hardy in the climate of Boston, yet, as a hedge, it is found to be completely so. This is, no doubt, owing to the short and well-ripened growth of each year, upon plants, so continually checked in their shoots by clipping, and by being planted so near each

other as to prevent that *suppy* and redundant growth, frequent in young single specimens."

In another place, in the same number of the Horticulturist, Mr. Downing, the editor, says:

"Osage Orange Hedges.—We are glad to find that this capital hedge plant, so easy of culture, so rapid in growth, so strong in its protective thorns, and so handsome in its foliage, is rapidly rising in public estimation. *Miles* of it are already planted about Cincinnati; and since it has been found hardy in the hedge form as far north as Boston, cultivators are trying it all over the northern states."

It thrives on all soils, where any tree or shrub could be expected to thrive—on a dry sandy soil, stiff clay, a deep black muck, we have seen it growing finely—indeed we know of no tree or plant that will grow so well on such a diversity of soils. It will also grow under the shade of trees, as in orchards, &c., better than any other plant we know of.

No Disease or Insects seem in the least to affect it.—This gives it a great advantage over the different species of hawthorn, which in this country are liable to blight or mildew, causing the leaves to fall in summer—and to the attacks of the borer.

Cattle will not browse it.—This is another desirable quality, especially while hedges are young; as it allows of much earlier use or exposure to stock, than could otherwise be practised. The juice of the plant is of a milky appearance, and so offensive to animals that they will not eat it. We have seen cows in passing a young hedge bite off a few leaves and immediately spit them out!

Will it throw up suckers from the root? This inquiry is one of much importance to some minds, and we have taken pains to obtain information respecting it. In viewing the beautiful hedges on the farm of Jas. Gowan, Esq., near Philadelphia, last summer, we noticed that he plows the land and plants crops quite close to the hedge,—so as that roots would often be broken if within reach of the plow; but we could not see a sprout once in three rods; and Mr. G. informed us that he found no trouble from that source, although occasionally a few sprouts would appear. We apprehend no serious trouble from this cause, owing mainly to the *downward habits of the roots*. They are inclined to run very deep, instead of extending near the surface. This we conceive is of much advantage in other respects: It enables the plants to withstand our frequent and severe droughts, and also to bear *crowding* as in a hedge, without dying out as those do which have many surface roots.

Its rapid growth when young is a decided advantage, as it thus forms an effective hedge in a very short time—but on the other hand it requires on this account more attention to trimming, until the hedge has become well grown, say 8 or 10 years old, after which time the growth is comparatively slow and less frequent clipping is required.—This necessity for frequent trimming (say twice in a season) while young, is the only disadvantage which we can discover in the way of growing hedges of this plant.—But those who have some knowledge of the ease and dispatch with which this work can be accomplished, will not regard this a great objection. We shall give directions on this point at another time.

Preparing and sowing the seed.—This is the point where the most difficulty has been experienced. We think however, that hereafter but few cases of failure will be experienced, provided good seed is obtained. From numerous experiments, successful and otherwise, during the past three years, we derive the following instruction:

If the ground is mellow and not liable to become hard by the rains of winter, and your seed is procured in time, sow the seed in the fall, or during an open spell in winter—but not when the ground is so wet as to be muddy.—The next best and most natural method, recommended for all clayey lands, or when the seed is not obtained in the fall, is to mix the seed with sandy earth in a box, during winter, wet it thoroughly, but see that the box allows the surplus water to drain off, then stand it where it will freeze thoroughly, and be exposed to all the changes of weather, till planting time, only seeing that it is kept moist. The seed will not begin to sprout till warm weather in Spring, when it should be sown in well prepared ground, and it will come up as quick and certainly as corn. If the seed is not procured in time for freezing, a very successful method of preparing the seed, is soaking it for 24 or 36 hours in *brine* strong enough to swim an egg, then 24 hours more in soft water, standing in a warm room. This we have not tried, but one of our neighbors, an experienced German Gardener, has found it completely successful with this and other seeds of difficult vegetation. Others of our friends have succeeded well with *scalding* the seeds in water not quite at boiling point, then soaking for 3 or 4 days; others, again, by *soaking* merely, in a warm place for five or six days.

In sowing, prepare a bed of good garden soil, and drop the seed in rows say one foot apart, and one inch apart in the rows, like a bed of onions or beets—covering the seed full an inch in depth. In this way the plants can easily be kept clean of weeds by hoeing, &c., the first year, when they will attain the height of 12 to 18 or 24 inches, with roots as long as the tops. A quart of seed costs only $1, (see advertisements) and may be expected to produce from 3,000 to 4,000 plants.

Planting the Hedge, and after culture in our next.

How much Corn Can you Harvest in a Day!

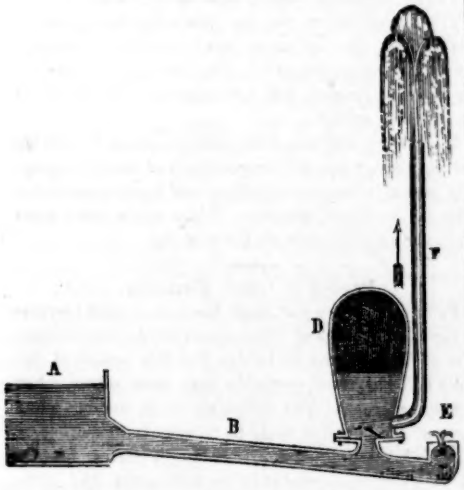
"Farmers might reduce much of their work to rule, as mechanics do, and determine how much is a reasonable day's job. We have heard men say they could harvest ten bushels a day, or sixty bushels a week—that is measuring after the corn is shelled. Ten bushels a day may be harvested by a good laborer, working some in the evening. But how many men have we who perform one half as much?"—*Mass. Plowman.*

A laboring man, familiar with husking or shucking corn, that could get ears enough in all day to make only five bushels of grain, would hardly do in Hamilton county, Tennessee, where corn is now selling at ten cents a bushel. At all events, he should not be paid over fifty cents a day for shucking corn, and have his board in the bargain.

What will our friend, the Editor of the *Plowman* say, when we inform him that we have just rode through corn fields of 800 acres, in which laborers, regarded as not so smart as Yakees, husk on the hill, ears enough to shell 50 bushels a day, without "working some in the evening?" These huskers have a piece of sharp iron or hard wood, tied about the wrist, with which they pierce the husk, or "shuck," (as the covering of the grain is called at the South,) open it, and break off the ear very

quickly. The corn is thrown in heaps on the ground.—Other hands pick it up and haul it into cribs or barns in large wagons. It is now, (Oct. 26,) selling, delivered on board of boats in the Savannah, at 44 cents a bushel.—*So. Cult.*

Can any of our Buckeye readers beat this?—*Ed. O. Cult.*



The Hydraulic Ram--How it Operates.

In the last number of our paper, Mr. H. Parks, jr., inquires whether in setting the hydraulic ram, it will answer to coil the driving pipe like the worm of a still; and if not, what is the principle of its operation whereby the difficulty is explained.

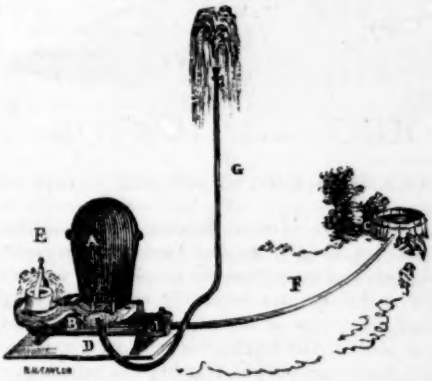
We have no knowledge of any experiment having been fairly tried to test this question; but reasoning from what we understand to be the philosophy of its operation we think it will not be found to succeed; at all events the machine will not act as efficiently with a coiled pipe as with a straight one. The reasons we will try to make plain, by reference to the above design.

Let *A*. represent the spring, *B*. the driving pipe (which should be 30 to 40 feet long) *D*. the air chamber, *E*. the escape valve, and *F*. the leading pipe. Now suppose there is a descent of 5 or 10 feet from *A*. to *E*., then when the valve *E* is open the column of water in the pipe, say 40 feet long and one inch in diameter is put in rapid motion—the valve then closes suddenly, and the *momentum* force, produced by the *weight and motion* of the column, is the *power* which drives very heavily against the lower end of the pipe and forces a portion of the water at each stroke up into the air chamber, and from thence through the leading pipe to any required height or distance proportionate with the extent of fall, and the size and strength of the machine.

Now a little reflection will enable our correspondent to see, that this power (*momentum*) must be greatly lessened by coiling the driving pipe, on account of the great increase of *friction* against the sides of the pipe—in the same way that a rapid stream is checked by short curves in its course, and the force of the water is wasted against the protruding rocks.

For a full description of the Hydraulic Ram and its mode of operation, see O. Cultivator, vol. 3., p. 137; also vol. 4., p. 81.

Such of our readers as have not read our last year's volume, may be assisted in understanding the use and operation of the Hydraulic Ram by the following cut and explanations:



(Explanation.—A. B. E. The machine; D. plank on which it stands; C. the spring; F. driving pipe from spring to machine; G. conducting pipe from the machine to the house, or place where the water is desired.)

This is a representation of Gatchel's Improved Ram many of which have been sold and put in operation in different parts of Ohio, during the past year.

The only Certain Mode of Poisoning Rats.—Make a rich sweet dough, with flour, mashed potato, sugar, and fresh *unsalted* butter; work this into pills as large as a marrowfat pea, strew them in a closet or room inaccessible to children, domestic animals, poultry, &c., for four or five nights in succession, until you find that the rats get into the habit of eating them; then omit the potato and substitute finely pulverized arsenic, and we will answer for every rat on the premises getting his quietus.—The rat is naturally so suspicious, that any of the usual modes of poisoning are very inefficient. You must first acquire their confidence, and then betray. As the effect of the poison is to make them exceedingly thirsty, it is best to choose a dry time for laying it, and remove all water from the premises; the rats will then make for the nearest stream, and die before they can return to their haunts. Apropos of rats, and their great sagacity in avoiding bates and traps, Dr. G. B. S., of Baltimore, relates the following: it seems, that being very much annoyed by the rats that infested his house, he succeeded, after considerable difficulty, in destroying them all save one, but this was the very Ulysses of the tribe, and he and the doctor had a trial of wits for a long time, but the doctor was too much for him at last; he discoved that his long-tailed enemy had a weakness, and, like a skilful general, he took advantage of it. His ratship, fearing poison, would eat nothing left in the kitchen, but the ends of the candles left in the candlestick; the doctor sprinkled some arsenic around the wick of his candle, and triumphed.—*Plow, Loom and Anvil.*

Want of Fresh Air.—The Hon. Horace Mann, in alluding to ill-ventilated school-houses, remarks as follows:

"To put children on a short allowance of fresh air, is as foolish as it would have been for Noah, during the deluge, to have put his family on a short allowance of water. Since God has poured out an atmosphere fifty miles deep, it is enough to make a miser weep to see our children stinted in breath."

OHIO CULTIVATOR.

COLUMBUS, OHIO, JANUARY 1, 1849.

Disappointment.—Several *Engravings* expected from a distance and designed for this number of our paper, failed to arrive in time; hence the articles they were intended to illustrate are necessarily omitted. Among these are descriptions of several "patent churns," and plans of houses. Our next number will present more originality than the present one, especially in illustrations.

The Report of the Ohio Fruit Convention, 1848, is in the hands of the printers and will be issued in a few days. It will make a handsome and valuable pamphlet of 64 or 72 pages, with a number of engraved outlines of fruits—price 25 cents, six copies for $1. Subscribers will receive their copies by mail, unless they otherwise direct.

The Ohio Legislature, after three weeks spent without effecting an organization of the lower branch, have at length agreed on a plan to organize; and will probably get fairly at work in a few days.

The Weather.—After a dry autumn, we have had plentiful rains during the past month, with but little cold or snow as yet.

The Cholera is said to be in New Orleans—deaths reported at 25 to 30 per day. At New York the disease, if it appeared at all, has not spread in the city.

"Vegetation traced to Natural Causes."—This is the title of an essay just published in pamphlet form, by Daniel Vaughan, of Kentucky. It appears to be a supplement to a pamphlet issued about a year since by the same writer, entitled a "New System of Vegetable Phisiology." Mr. Vaughan advances some new theories in regard to vegetable nutrition, decomposition, effects of heat, electricity, &c., of much interest to scientific culturists.

Buchanan's Journal of Man, No. 1, is on our table, but we have not found time to peruse it.

(Other publications noticed in our next.)

Telegraph to California and Oregon.—Mr. Henry O. Reily, the great telegraph builder has presented a petition to the U. S. Senate, for an act to enable him to establish a telegraphic communication between the Mississippi valley and California and Oregon. It was referred to the committee on Territories.

Sweet Potatoes, Varieties of Seed.

Mr. Henry Stanley, of Circleville, informs us, in answer to the inquiry in our last, that he has a good supply of sweet potatoes saved for seed—of three varieties, viz:

Jersey Red—fine yellow flesh, with red skin.

North Carolina Yellow—long yellow, sweet and good.

Yellow Bermuda,—short, thick, early variety.

These he considers the best kinds for cultivation in this climate. He has raised sweet potatoes extensively for several years past, and is very successful in preserving the roots for seed, and sprouting them for the sale of plants in the spring.

Mr. Stanley will have both roots and plants for sale the coming spring; and will keep a supply of the roots, properly packed in boxes of a peck or half bushel each, at the office of the Ohio Cultivator. Prices will be stated hereafter, and some remarks on Culture, &c.

Profits of Dairy Farming.

For a year or two past there has been a rapid increase in the dairy business of Ohio—especially in the manufacture of Cheese—and we believe that this branch of farming is found more profitable than most others, when rightly managed. The following is one among many items of the kind that could be furnished:

Orrin Willson, Esq., of Huntsburgh, Geauga Co, O, has kept seventeen cows only the past season, and without any very extra keeping, has realized from his dairy the sum of $606,00, which gives the sum of $35,64 cts. each cow. This does not include the calves sold, or hogs fattened from the dairy; and a quantity of butter and cheese yet on hand.

"Domestic Fish Ponds," Again.

In our paper of Oct. 15, (vol. 4. p. 157) we gave an article on this subject, and alluded to the pond of *gold fish*, on the grounds of Jacob Hoffner, Esq., near Cincinnati. A few weeks ago, being in Cincinnati, we called on Mr. Hoffner, and in connection with the pleasure of rambling through his beautiful grounds and well filled conservatories and greenhouses, we took occasion to make sundry inquiries in regard to fish ponds and fishes—especially his management of the pond of *gold fishes*, which form a novel and most attractive feature of his pleasure grounds. To all of our inquiries Mr. H. very cheerfully responded, and we give the substance of his remarks for the benefit of such of our readers as may have suitable facilities for trying experiments in raising fishes for use or ornament.

In the construction of artificial fish ponds, Mr. H. said, much care and expense would commonly be required, to prevent *leakage*, especially where *craw-fish* abound, as they do on his grounds and in most wet soils in this country. These animals make holes through the embankments, and thus let off the water; and even stone walls, unless laid very deep, and made perfectly tight with water lime cement, would afford no protection against their inroads.

Another point demanding attention, is, to make the pond of irregular shape, having shallow bays and estuaries on the sides, where the smaller fishes can sport, out of the reach of the larger ones, which would otherwise

devour them. This direction applies especially to ponds designed for rearing fishes of various kinds for domestic purposes. Gold fishes and other small kinds, do not appear at all to feed on each other; nor, indeed, is it easily discovered what kind of food they do subsist on.

In regard to *feeding*, Mr. H. said, unless the pond is quite large, so as to afford them sufficient range to gather insects and vegetable substances, the larger kinds of fishes must be occasionally fed—say two or three times a week, with scraps of bread, meat, and other refuse matter from the table and kitchen; but the gold fish, and other small kinds, even though confined to limited space, seem to thrive best without any other food than that derived from the water, and the small animal and vegetable substances that may be found therein.

Mr. Hoffner's gold fish pond is about 30 feet in diameter, and five to seven deep—fed by a running spring of pure water. In this he put 80 gold fishes, five years ago. Since that time he has taken out *over one thousand*, and from appearances we should judge there are at least that number remaining. They require no care or attention whatever; no feeding is necessary, and no danger need be apprehended if the pond freezes over in winter.

Large Corn Crop.—Mr. John Loughry, one of our subscribers in Adams county, raised the past season, *fifteen hundred bushels* of shelled corn, on *eleven acres* of ground, or 136⅔ bushels per acre for the whole field!—Has any farmer in Ohio beat that?

Our friend of the Massachusetts Ploughman won't believe this statement, we dare say—for he never travelled, and has'nt seen corn crops! We would thank friend Loughry to send us particulars, as to soil, culture, &c.

Correspondents.—It gives us much pleasure to welcome friend Lapham back to the columns of the Cultivator. Having a respite from his duties in the city, (as Canal Collector) he is spending a few weeks on his farm, and this has had the effect to wake up his mind and pen, as in times past. We hope for several more articles from him.

Mr. Keener's article will be read with interest, and we hope may excite to experiments of much value.

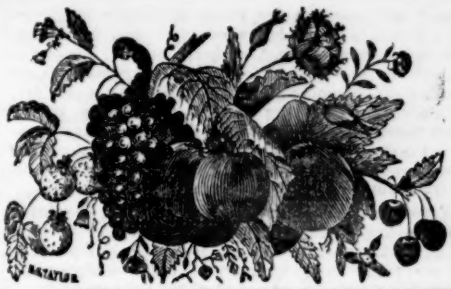
A large number of inquiries are unavoidably deferred till next number, our time being so much occupied just now.

☞ Now is the time for our host of warm and firm friends to do us a favor with very little trouble. Have you friends or neighbors who do not take a paper? Show them the Cultivator, and ask them what they think of it. Long evenings—plenty of time to read—new volume just commenced.

☞ That sterling family paper, the Lancaster county, (Pa.) Farmer, speaking of the Ohio Cultivator, says:—"We like Mr. Bateham's sound and practical views on matters and things, and are pleased with the Cultivator—hope he is well sustained by the Ohio Farmers.

Hogs have *riz*—see market reports, on last page.

P. S. Contrary as usual, they would'nt stay *riz!*



HORTICULTURAL DEPARTMENT.

☞ One or two communications designed for our Horticultural Department, did not reach us in time for this number. We hope our friends will write earlier in future.

Practical Hints to Amateurs.

BY "AN OLD DIGGER."

Grafts may be cut now, as well as later in the winter, if more convenient to you. Keep them in a cool place, half-buried in earth or sand, till you want them. If not wanted till spring, bury them out of doors, with only a couple of inches of the points exposed, and throw two or three inches of litter over them.

Strawberry beds will produce good crops in open winter quarters, in the Northern States; but they will bear much better ones, and much larger fruit, if you cover them lightly with straw, salt-hay, or stable litter; otherwise you are likely enough, in stiff soils, to find half the plants dead or injured by being "thrown out in the spring."

You may transplant, all winter, when the ground is not frozen—only take care not to expose the roots to frost while not covered with soil. In winter-planting, it is best to pile up a mound of earth 6 or 8 inches around the trunk of the tree. This keeps it steady, and protects it, partially, against severe frost.

If you are very anxious to be cheated, send to some nursery that mostly informs the public of its immense superiority over every other establishment in the world; or that offers hundreds of varieties of "splendid, pre-eminent, and delicious" fruits, not to be found elsewhere—or that challenges competition for accuracy. Where there is so much modesty in boasting, there must be great diffidence in sending you anything but what the dealer knows to be first rate; and you must be aware, yourself, that there are now *hundreds* of *first rate* fruits. If you send to a nursery for a new variety of tree or plant, don't expect to see the plant as high as your head, or the tree fit to bear a bushel of fruit. Be content if it is healthy, has a good root, and is a foot high. People "in the trade," can't afford to send you large trees, full of grafts or cuttings, of sorts which are scarce as guineas, and which have not been long enough in the country to enable them to get more than one year's growth. If you want "big trees," order the good old standard sorts.

When a tree brought from a distance has been a long while out of the ground, and looks quite dried up, plunge it into a tub of water; that would be well-nigh as fatal as giving a gallon at a single drink, to a man nearly dead of thirst. *Moisten* the roots, and after shortening the branches severely, bury the *whole tree* in the ground for three or four days.

When you prune a small branch of a tree, always see that a *bud* is left opposite the cut; this will help it to heal over quickly: and you will assist the matter still more, by making the cut always a *sloping* one.

If you are obliged to plant trees in the rich but worn-out soil of an old garden, and you have not time nor means enough to cart away part of the old soil and re-

place it with new, you can renew its fertility by throwing a part of it up in heaps, mixing it with brush, faggots, saw-dust, or any sort of cheap fuel, and burning it.

Don't let insects of various kinds over-run your orchard or garden, and then lazily fold your arms and say, "it's no use, this trying to raise things, now that so many vermin are about." Spend three days, industriously, in the early stage of the matter, in putting down the rascals, and then look around you and see if a little industry is not better than grumbling

If you want early vegetables, set yourself, in winter, about making some boxes to protect them. A few cheap boxes, a foot square, with a pane of glass in the top, to put over tender things at night, will cost you but a trifle, and will give you ten days start of the open ground.

To have good currents, goosebrries, or raspberries, the old plants should be dug up at the end of three or four good crops, and their places supplied by young ones. If you plant a few cuttings of the two former, as you should do, every spring, you will always have a supply of fresh plants ready at all times: always cut out all the eyes (buds) of a cutting, on that part which goes in the ground —otherwise you will be troubled by their coming up, year after year, in the form of *suckers*.

If you have a tree that grows "apace," but won't bear, dig a trench round it, and cut off a third of the roots.—This will check its growth, and set it about making fruit-buds.

Never buy fruit trees in the "market-places," of unknown venders, who have no character to lose. You cannot tell by "examining the article," whether they cheat you or not; and you get your tree at half price, only to wish, when it comes to bear, that you had gone to an honest dealer and paid ten times as much, for something worth planting. "Hog-Peach" trees are dearer at a penny, than "George the Fourths" at a dollar.

If you don't love flowers yourself, don't quarrel with those who do. It is a defect in your nature which you ought to be sorry for, rather than abuse those who are more gifted. Of what possible "*use*" is the *rainbow*, we should like to know? And yet a wiser than you did not think the earth complete without it.

Do not grudge the cost and labor necessary to plant a few of the best shade-trees round your house; and if you have any doubts about what to plant, stick in an elm.—There are few trees in the world finer than a fine sweeping elm; and two or three of them will give even a common-looking dwelling a look of dignity. If you plant fruit trees, for shade, they are likely to be broken to pieces for the fruit, and they grow unsighly by the time that forest trees grow spreading and umbrageous.

There are very few men whose friends build so fair a monument to their memory, as they can raise with their own hands, by planting an elm or a maple where it can grow for a century, to be an ornament to the country.

Don't be afraid to clip hedges, or cut-back young trees, when you are planting them. You gain more growth than you lose, though you may not be able to comprehend it till you have seen it with your own eyes.

Never work your ground in wet weather if you can avoid it, as it makes it cold-like and compact by forcing the air out. And ridge up your kitchen garden ground before winter so as to expose as much surface as possible to the action of the frost.

Never lose an opportunity of getting *sods* from the corners of old pastures, or the breaking up of commons or meadows, where they can be spared. Placed in heaps, and rotted, they make excellent mould for tender plants or trees; placed in a pile and burned, they form the best fertilizer for roses and rare flowering plants.

Send a man about your neighborhood to collect all the bones that are thrown away as useless by persons ignorant of their value. Put them in a large pot and pour sulphuric acid and water over them, and they will all turn to paste, and finally to powder. This is the best possible manure for pear trees and grape vines.—*Horticulturist.*

David Thomas, of Cayuga Co., N. Y.

The readers of agricultural papers feel the great loss they sustain by the absence of late, of the quaint, spicy, and intelligent articles over the signature of D T., of Greatfield, Cayuga co., N. Y. Few men in the United States have contributed more ufeful, available, and practical information to the agricultural community, and especially on subjects of horticulture, and pomology. It is to be hoped that he has not entirely laid aside the use of his pen; and that he will continue to send forth occasional glimpses of the interior of the great store house of practical wisdom and experience which he possesses.

It is pleasant at times to let the mind wander backward, and recall to memory the happy scenes of boyhood. I remember when but a lad, I was called upon to assist in an humble capacity, in the original location and construction of the Welland Canal, in Canada, under the experienced guide of David Thomas, as Chief Engineer.—In his rambles in search of rare minerals, new plants, or geological explorations, he would have me accompany him. It was a rich treat to bear him company, and to hear him discourse, as we passed along, within the sound of the great Falls, of the superposition and stratification of the rocks over which we were clambering; and of the mighty flood which had piled up, and scattered over the globe, the materials of the soil; and occasionally picking up a fossil shell, or mineral specimen, or some new plant, upon which he would discourse with words of wisdom.

Especially do I remember one ramble we took, when

"The sun of May was bright in middle heaven,"

and we had gone far

"Within the woods,
Whose young and half transparent leaves scarce cast
A shade;"

when resting ourselves upon a moss-covered log he plucked an Erythronium, and there he first opened to my mind that great and most important law of the vegetable kingdom, which was first announced to the world by the immortal Linnæus, respecting the sexual character of plants; and there it was that I first received a glimpse of the nomenclature of stamens, pistils, anthers, stigma, calyx, corolla, capsule, &c., and of their uses. The impressions made upon my plastic mind at that age, I have no doubt, gave a direction to my course through life thus far. And to them I am indebted for much of the worldly success which I have met with; and especially do I owe to him my gratitude for much of the happiness and enjoyment of life which has fallen to my lot.

But he must be getting old now; for these things took place more than twenty years ago; and I still remember him as

——— "a white-haired man,
Pithy of speech, and merry when he would;
A genial optimist, who daily drew
From what he saw his quaint moralities.
Kindly he held communion, though so old,
With me, a dreaming boy, and taught me much,
That books tell not, and I shall ne'er forget."

Respectfully, D. Lapham.

Mount Tabor, Dec. 22, 1848.

Remarks.—All who are acquainted with the man who is the subject of the foregoing remarks, we are sure will heartily respond to the sentiments expressed by friend Lapham. We received a friendly letter from David Thomas only a few days ago, in which he alludes to his advanced age as a reason for having laid aside the pen of late. We thought, however, on noticing the cheerfulness and energy with which he participated in the doings at the Buffalo Fair in September last, that "Time had touched him lightly," and the public might yet hope for some further services from him.

We have on hand his address delivered before the Buf-

falo Horticultural Society which we design to publish, in whole or in part.—Ed.

Seedling Grape--Asparagus.

Friend Bateham:—I notice in the Ohio Cultivator, No. 21, page 165, a premium offered for Catawba, and other seedling grapes equal to the original; but the Isabella is not mentioned in the list. I wish to know whether the same or any premium will be given for seedling Isabella grapes, equal to the original.

I have some seedlings from the Isabella, that have borne for two years past, of different colors, that I prize highly, one of which thee may remember I presented at the last State Fruit Convention. At our County Fruit Convention one of the kinds was considered by the judges preferable in flavor to the parent grape.

As ours is a day of great improvement in Horticulture, as well as in the arts and sciences generally, I have been surprised that so little attention is paid to that agreeable and wholesome plant, Asparagus. I see it is noticed in but three places in the first three volumes of the Cultivator, and I have passed from East to West, through this State, and seldom see, or hear of its being in common use among farmers. Now, as the three places in which it is mentioned, enough is said to induce a trial of it at least, it is not my intention to go further at present than in the strongest terms to recommend it to the attention of farmers generally; as it is one of the best, and requires the least labor according to its use and value, of any other vegetable.

Now get seed, sow it in either fall, winter or spring, when the ground is not too wet; and not neglect it because it requires three years before it will send up as strong shoots as it will afterwards; for with care it will last 20 years or more. Devote 4 or 6 feet wide across one side of your garden, acquaint yourselves with the different ways of preparing it, and see whether any other part of your gardens will more richly repay you for your labor. Remember by keeping it cropped off, it continues from early in the spring till harvest. H.

Penn Township, Morrow Co., O., 1848.

Report on Apples

By the Pomological Convention at Buffalo.

In our paper of 15th October last, (vol. 4, page 158,) we gave an abstract of the report of this Convention as far as relates to peaches, pears, plums, &c., but omitted apples, intending to give these in a subsequent number of the volume. It escaped our memory, however, till the volume was finished. We now copy from the Albany Cultivator, the abstract prepared by J. J. Thomas, who was one of the Secretaries of the Convention:

The following decisions were made relative to

Apples:

The *Yellow Harvest*,—this name being adopted in preference to Early Harvest, as being more descriptive,—worthy of general cultivation.

The *Tart Bough*—three weeks later than Yellow Harvest, which it resembles,—and second rate in value from its lateness.

St. Lawrence—regarded by most as first rate,—by others as not fully so, but to be admired for its size, beauty and vigorous growth.

Dyer, or *Pomme Royal*, known also in some parts of Western New York by the name of *Hollow Crown*, first rate.

Early Joe—regarded by all as of the highest quality when fresh from the tree. But it was stated by several that it would lose much of its flavor in a day or two, and is therefore unfitted for a distant market.

Early Strawberry—first rate for its season.

Sweet Bough—a first rate sweet summer apple.

Sine Qua Non—first rate.

Toole's Indian Rareripe—first rate for cooking, second rate for the table.

Minister—large and handsome, second rate.

Summer Rose—first rate.

Summer Queen—first rate for cooking, second for the table. A sweet apple, ripening the same time, and known as the *Augustine*, is sometimes erroneously called Summer Queen. The latter was decided to be third rate.

Duchess of Oldenburgh—first rate for cooking, second for table.

Fameuse or Pomme de Neige—voted, but not unanimously, to be first rate, in northern regions especially.

Rhode Island Greening—a first rate standard fruit, both for table and cooking.

Red Astrachan—passed by. It should have been stated to the convention that this variety although not a good table fruit, possesses great excellence as a very early *cooking* apple, being far superior in this respect to the Yellow Harvest.

Newtown Pippin.—Much discussion took place relative to this celebrated variety. Several delegates regarded it unworthy of cultivation in western New York, on account of its defective fruit. Others regarded it of the highest value; and facts were stated showing that in instances where it had been ivariably poor, its quality had been greatly improved by rich cultivation, and particularly by the application of ashes.

The *Yellow Newtown Pippin* was considered inferior in quality.

A half bushel of the *English Russet* of Downing, was presented to the convention—they were of last year's growth, and were quite fresh, sound and agreeable. As the name English Russett was not considered sufficiently distinctive, it was concluded to call this variety the *Poughkeepsie Russet*, by which it is also known. It was decided to be first rate as a long keeper, and second rate in quality for the table.

Lowell Apple—known also as *Orange*, *Oswego Orange*, *Tallow Apple*, or *Tallow Pippin*, and at Cleveland as *Queen Anne*, and remarkable for its oily surface a few days after it is gathered. Though not fully first rate in quality, it was decided to be worthy of cultivation on account of its large size, fair and handsome appearance, and great productiveness.

Westfield Seek-no-further—first rate.

Vandevere—first rate.

Ribston Pippin—third rate, except in northern regions, where it proves fine.

The *Northern Spy* created much discussion. It was admitted to require good cultivation, and careful pruning, to develope its fine quality—that the the Rhode Island Greening, and Roxbury Russet would flourish where the Spy would be nearly worthless—but that, with proper treatment, the latter was a fruit of high excellence.

Twenty Ounce—first rate in size and beauty, second in quality.

Gravenstein—first rate.

Esopus Spitzenburgh—first rate.

Beauty of the West—third rate.

Fall Pippin—first rate in every respect.

Late Strawberry—first rate.

Swaar—first rate in all respects.

Belmont Waxen, or *Gate*—first rate,

Hawthorndean—unworthy of cultivation.

Mother Apple—first rate.

Baldwin—first rate in Massachusetts and New York, unsuccessful in Ohio.

Jonathan—first rate, taking all its qualities into consideration.

Porter—first rate in all localities.

Rambo—first rate, and succeeding equally well in the Eastern and throughout the Western states.

Hubbardston Nonsuch—first rate--only equalled in richness by Swaar, Esopus Spitzenburgh, &c

Pomme Grise—first rate in the North and in Canada.

Gloria Mundi, or *Monstrous Pippin*—unworthy of cultivation.

Bullock's Pippin, or *American Golden Russet* of Down-

ing, the former name recommended by the convention—worthy of general cultivation.

Jersey Sweet—first rate for its season.

Cornish Gilliflower—unworthy of cultivation.

American Summer Pearmain—first rate.

King of the Pippins—second rate.

Summer Hagloe—distinct from the Hagloe crab—first rate, but not unanimously.

Use of Top Dressing in Gardens.

We find the following article in the Horticulturist, copied from the London Gardner's Chronicle. As it relates to a subject which has lately been discussed in our columns, and is of much importance to Horticulturists in this sunny climate, we trust it will be read with interest.

Top Dressing or Mulching.—Few persons are fully aware of the immense importance of top dressings. To regard them as merely warding off drouth is to take a very superficial view of the affair; their merits may, I think, be classed as follows: 1st. They may be made capable of transmitting a vast amount of food to a suffering tree in a very speedy way. 2d. They retain a steady permanency of moisture, in spite of adverse circumstances, without stagnation. 3d. They are the cause of a series of annual fibres, which are of much importance to tender trees. 4th. By means of such, continued systematically, trees may be planted in shallower soils than without them; this tends to the production of much better ripened wood. 5th. If a check is needed through rampant growth, or the total absence of fruit, the removal of the dressing in summer will supersede the necessity of root pruning.

With regard to the first point, I may observe, that it frequently becomes necessary during dry periods to apply water to trees in full bearing; indeed many a good crop is lost or stunted for want of a timely application of this needful element. Nevertheless, somewhat depends on the temperature of the water. Cold spring water, applied in considerable quantities to the naked soil, may do more harm than good. It is far better to make use of the mulching as a medium, and water it in a successive way.

To proceed with the second consideration. No person who has used top dressings will doubt their influence in retaining a permanency of moisture, in defiance of long continued hot weather. By this medium, a vast amount of nutritious moisture, which would be otherwise dissipated, is reserved for absorption by the upper series of fibrous roots.

In the third place, top dressings, in almost all cases, excite to the production of abundance of surface fibres of a permanent character, produced in a regular annual series. These are most important organs in several respects, which I will attempt to show in the sequel. In the meantime, I would merely point to one particular circumstance of paramount importance; they tend, in no small degree, to prevent the formation of tap roots, which are notorious as being inimical to the production of blossom buds.

As to the fourth consideration—the systematic application of top dressings, as obviating the necessity for deep borders, which are but too apt to lead the roots to a depth beyond the agencies of the atmosphere, and to render the tree uncontrolable, I can only say that the question has been a growing one during the last seven years, and that owing to the free discussions of the points connected therewith much improvement has taken place, not only in vine borders but in those for other fruits. It is a pretty well attested fact, that the shallower the root the earlier and more profound the ripening period. This idea may of course be carried too far, and trees may be driven from Scylla to Charybdis; but the great evil of the old system having been over-excitement, through deep and rich borders, it becomes a duty for awhile, I conceive, to point to an opposite course. By the systematic application of such I merely mean that the application of an annual top dressing, however slight, is anticipated by this system.

Our fifth point refers to the facility afforded by this mode of cultivation for checking undue luxuriance.—This will seldom occur where top dressings are resorted to in a systematic way. Still in the event of trees thus circumstanced becoming too gross in the young shoots, the mere removal of the top dressing in early summer will go far towards taming the tree, unless it has formed some tap-roots of most inveterate character.

Having now disposed of the five main points, which form, as I conceive, the principal features in a system of top dressing, as applied to somewhat shallower borders than were originally in use, I would now beg to offer a few remarks on the propriety of securing a permanency of moisture at the root of certain plants. Everybody must be aware that many plants of this habit cannot be successfully cultivated without securing a certain amount of moisture at the root, of a permanent character. The most prominent amongst these are the Black Currant, the raspberry, and, I may add, the quince, amongst fruit bearing shrubs; and celery and lettuce amongst our culinary vegetables. It so happens that this latter question is interwoven in some degree with the top dressing affair, at least under my mode of cultivation. Last year the Black Currants in this part of the kingdom were subjected to the most severe blight I ever remember; they were devoured by aphides; the leaves were almost entirely stripped from the trees, and the fruit were of course either cast to the ground or withered prematurely. Drouth at a certain period was, I am peruaded, the cause of all this; for it ought to be generally known that the Black Currant has a greater tendency to produce surface roots than any other fruit tree; this, of course, renders it very susceptible of atmospheric changes, and points at once to a special mode of culture. However, I considered that there could not possibly be a crop in the next season.—Having some alterations this spring which brought to hand a surplus of soil, I covered the surface of the Black Currant roots five inches in thickness with this soil. We have had a very fine crop, and the soil is now filled with fibres. The Black Currant should, I think, be planted in sunken trenches or panels at least nine inches below the ground level; in fact, similar to celery, and in that event would bear a top dressing of mere leaves or litter of any kind every year, applied immediately after a wet period in the spring. Raspberries are so fond of a permanency of moisture that they thrive to admiration in a bog under some trees, within a short distance of where I write. Indeed, our soil being sandy, I could not obtain full crops until I adopted an annual system of top dressings. In applying this my practice is to remove a couple of inches of the surface soil with a draw hoe in December; then to apply a couple of inches of compost, and finally a coating of soil, to prevent loss by desiccation. I never dig over the surface of these things, but use the spade full depth to within a reasonable distance, generally cutting a little off the extreme points of the roots annually; this encourages the surface roots, and has a tendency to check superfluous spray at the same time that steady growth is ensured, through the medium of the top dressing, and sudden vicissitudes of drouth obviated. There is undoubtedly much waste of manure in many cases, extra quantities being often applied when perhaps mere permanency of moisture at certain periods is the disderatum. Of what use would any given amount of manure be to the Black Currant or celery crop, if the plant is to be subjected to a continual lack of moisture?

Long Parsnip.—Our friend John Barnard has left with us a Parsnip, of the sugar variety, that measured, in length, when taken from the ground *seven feet and one inch*. We have suspended it in our sanctum, for the inspection of the curious. In weight, it is not remarkable, but it is peculiar in its great length. The soil was rich and sandy, and the present softness of the earth enabled Mr. Barnard to draw it out without breaking. The root ran perpendicularly into the ground. Can this be beat in all Buckeyedom?—*Zanesville Gazette.*

California Gold Fever.

This malady seems to prevail to an alarming extent throughout the whole country—from President Polk, downwards, (or upwards as you please!) Even our shrewd friends "away down east" where the climate is proverbial for salubrity, have caught the infection very extensively. The editor of the Massachusetts Ploughman, says:

The gold fever has not yet abated, and the great distance of the country in which it originates will cause its continuance in proportion to that distance. The pine tree fever in Maine lasted but a short time, for our intercourse with that State was too intimate for its continuance.

The largest lump of gold that has yet been found in California is asserted to weigh but thirteen pounds, Troy weight, but then it should be considered that the whole region has not yet been explored, and that the borders of fields never produce such great crops as the more central parts.

One emigrant, and one only, proposes to take a plow and hoe with him. He thinks he may want some bread to eat; and if he can settle on a good yellow field and plant yellow corn, he will stand a good chance to have his cake and money too, confounding the old maxim to the contrary that has stood for ages past.

He proposes to plant numerous acres with yellow corn, and as nothing but gold is found in the soil, he will have no weeds to encounter, and can manage a large field.—Instead of having weeds between his rows of corn, he means to hoe out the gold that may be in the way of the corn roots, and save it all as carefully as he would the main crop, the corn.

This farmer is considerably in debt, and he honestly intends to pay all; but he is exceedingly anxious for fear his creditors will be unwilling to take gold in payment, and that his corn will be seized instead of it. Will his creditors be willing to receive their pay in gold one year hence? It may then be worth but a trifle.

The Light of Knowledge.

Knowledge cannot be stolen by or from you. It cannot be sold or bought. You may be poor, and troubled by the sheriff on the journey of life. He may break into your house and sell your furniture at auction; drive away your cow; take away your ewe lamb, and leave you homeless and pennyless: but he cannot lay the law's hand upon the jewelry of your mind. This cannot be taken for debt; neither can you give it away, though you give enough to fill a million minds. I will tell you what such giving is like. Suppose now that there were no sun nor stars in the heavens, nor any thing that shone in the black brow of night, and suppose that a lighted lamp were put into your hand, which should burn wasteless and clear, amid all the tempests that should brood upon this lower world. Suppose next, that there were a thousand millions of human beings on the earth with you, each holding in his hand an unlighted lamp, filled with the same oil as yours, and capable of giving as much light. Suppose these millions should come, one by one, to you, and light each his lamp at yours; would they rob you of any light? would less of it shine on your own path? would your lamp burn more dimly for lighting a thousand millions?

Thus it is, young friends. In getting rich in the things which perish with the using, men have often obeyed to the letter that first commandment of selfishness; "Keep what you can get, and get what you can." In filling your minds with the wealth of knowledge, you must reverse this rule, and obey this law; "Keep what you give, and give what you can." The fountain of knowledge is filled by its outlets, not by its inlets. You can learn nothing which you do not teach; you can acquire nothing of intellectual wealth except by giving. In the illustration of the lamps which I have given you, was not the light of the thousands of millions which were lighted at yours, as much your light as if it all came from your solitary lamp? Did you not dispel darkness by giving away light?

Remember this parable, and whenever you fall in with an unlighted mind in your walk of life, drop a kind and glowing thought upon it from yours, and set it a burning in the world with a light that shall shine in some dark place to beam on the benighted.—*From the Christian Citizen.* E. BURRITT.

HOUSEWIFE'S DEPARTMENT.

We are gratified to find that our female friends are determined to maintain interest in the Housewife's Department, by contributing frequently for its columns. Some of them, too, deserve our sincere thanks for their successful endeavors to increase the circulation of the Cultivator among their neighbors.

MARIA will be on hand for next number.

Intellectual Improvement in Females.

As the present is emphatically an age of reform, I trust that a few words spoken to my Sisters of Ohio, through the medium of the Cultivator, will not be received unkindly. I have long noticed with regret, the almost total indifference manifested by females of the West, in regard to the great principles of reform and improvements appertaining to our own sex. I think there is yet a great work to be done among *ourselves*, before we can accomplish much for the benefit of others. Let the work begin in our own minds, and its influence would soon be felt, and acknowledged by the whole world. In the first place I would ask, are we doing all we can for the advancement of truth and science? Are we, according to the best of our abilities, fulfilling the true "Mission of Woman?" If we are not prepared to answer these questions in the affirmative, not an hour should be lost. It is time that we were waking up to a sense of our duty, and to an improvement of our precious privileges. Such privileges we have, and the fault is our own, if they are not improved. What reason can be assigned, why the females of our own glorious West, should not rival the Daughters of New England, and even of the 'Old World,' in their literary acquirements and productions. Are not the means within our reach? Have we not Colleges and Institutions of learning, throughout the length and breadth of our land? Have not many of us daily access to well filled libraries, and ample time to devote to reading? Then, why not make some effort to arouse our slumbering intellects, and bring the dormant powers of our minds into action. Many young ladies plead inability to the task, and think they are not endowed with sufficient intellectual powers. Away with such reasoning! Would you arraign the goodness of that Almighty Power, at whose hand you have received every "good and perfect gift," and who has given you minds susceptible of an endless chain of improvement? Rather improve what talents he has kindly bestowed upon you, and others may yet be added. You have never fathomed your own minds, and consequently, are ignorant of their depths.—I freely acknowledge the superiority of talent, displayed by some of our gifted writers, of present, and past ages; but this is no reason why we should keep what faculties we are in possession of, buried in our own bosoms. If young ladies would make it a rule, to commit a few thoughts to paper every day, even though they should instantly consign it to the flames, they would find it to be of great benefit, in strengthening their mental powers. Devote fifteen or twenty minutes to this exercise, daily, and after persevering in this course for a time, you will doubtless, discover a rich mine of thought, of which you were before ignorant. Woman in whatever station she may be placed, will find ample scope for the diffusion of a large amount of knowledge. Then should she not strive to summon all her powers to action? Her duty,

to her Maker, to her family, to herself, and to the world at large imperiously demand it.

If, then, you would attain this great end, the restoration of Woman, to the great mission for which she was designed, cultivate your own minds. Let wisdom be your guide, and she will conduct you safely through the intricate paths of science, and cheer your way by the assurance that you are engaged in a work, whose influences will be felt in all coming ages. Let us then be encouraged, and stimulated to the improvement of those faculties which shall bring us such a rich reward while here, and a glorious immortality hereafter.

Country Shade, Miami co., Dec., 1848 "Elva."

Ague in Children.

Perhaps we are not all aware of the great influence, as it respects disease in general, and this one in particular, of attention to wholesome physical habits—cleanliness, due change of linen, due temperature in clothing and bedding, &c. If therefore our Editor should think it a suitable consideration for his readers, I would give them an experiment very successfully made on this subject last summer. I have been distressed to see in many places so little attention to these things, children almost continually, some one or other of them, suffering with this malady; then breaking it with calomel, arsenic, quinine, &c.; and it may be the children dropped into their beds just as they happened to fall asleep, in the clothes worn through the day, saturated with perspiration, the pores of the skin clogged with dust, no relief vouchsafed to the system by loosening the strings, bands and buttons; sometimes overwhelmed with a feather bed, in a room already too much heated with fire or stove, and their bed-linen any thing but clean. It is hardly supposable that any of the readers of this paper are guilty of such inconsistency but they may be useful to others less favorably circumstanced; for these things are not uncommon.

I took under my care last spring, two children who had been afflicted with this disease with little intermission, since their birth. They had then been having it about once a week, keeping it so far under by medicines. After coming to me, one of them had a slight chill about seven days after, and another about seven days after that, and that is all of the ugue they have had. My treatment was as follows: I washed them thoroughly all over in cold water, (not having convenience for bathing) standing them in a dry vessel, twice a week regularly as soon as they rose in the morning, then put them into their warm bed for about ten minutes, before dressing. In the last evening of the week I washed them all over with warm water and soap. I was particularly careful not to let them sleep in any of their day clothes, but only in a muslin night shirt. To have them sufficiently covered in the night, but not too warm; to keep them always, night and day, as *cool* as I could pleasantly to themselves; and so in winter also—changing their garments with the weather. When the chill came on I gave them a small dose of laudanum; put their feet and legs into warm water for fifteen minutes and then into a warm bed—in about ten hours they woke well. This I did the second and last time.—They have now been with me five or six months and are growing very fast and hearty. L. P. C.

Fairfield Co., O., Dec. 1849.

Something about Poultry.

To distinguish the age of Poultry.—There are various ways of deciding the age of poultry. If the bottom of the breast bone, which extends down between the legs, is soft and gives easily, it is a sign of youth; if stiff, the poultry is old. If young, the legs are lighter, and the feet do not look so hard, stiff, and worn.

There is more deception in geese than in any other kind of poultry. The above remarks are applied to them; but there are other signs more infallible. In a young goose, the cavity under the wings is very tender; it is a bad sign, if you cannot, with very little trouble, push your finger directly into the flesh. There is another means by which you may decide whether a goose be tender, if it be frozen or not. Pass the head of a pin along the breast or sides, and if the goose be young, the skin will rip like fine paper under a knife. The web between the toes, when young, is tender and transparent; when old, coarser and harder.

Size of Poultry.—Small boned, well proportioned poultry greatly excel the large boned, long legged kind, in color and fineness of flesh, and delicacy of flavor; for it is held good, that all animals of the domestic kind, those which have the smallest, cleanest, finest bones, are in general, the best proportioned, and are covered with the best and finest grained meat; besides being, in the opinion of good judges, the most inclined to feed, and fattened with the smallest proportionable quantity of food, and the greatest comparative weight and size.

Killing Poultry.—The best method of killing fowls is to cut their heads off at a single blow with a sharp axe, and then hang them up and allow them to bleed freely.—By this process they never know what hurts them, or endure pain for a second. Wringing the necks of poultry is almost as shocking as nailing their feet to planks, for the purpose of fattening them, and follows in the same barbarous category.—*Am. Agriculturist.*

Indian Meal Puddings.

Baked Pudding without Eggs.—Boil a quart of milk, and turn it upon three pints of sifted Indian meal, when it is cool stir in half a tea-cup of butter, and half a tea-cup of sugar melted together, a tea-spoonful of salt, and a grated nutmeg. Mix them well, and bake three hours.

Cheap Baked Pudding.—To one quart of boiled milk, while hot, stir in a tea-cup of Indian meal, a table-spoonful of ginger, about a gill of molasses, and half a tea-cup of suet chopped very fine. Bake two hours.

Another Plain Baked Pudding.—To two quarts of milk, add half a tea-cup of molasses, and a tea-spoonful of salt, scald it, and while it is boiling stir in Indian meal until it has about the consistency of griddle cakes. Put the mixture in a batter pan, and just before you bake pour on a tea-cup of cold milk. Bake two hours.—*Ex.*

Baked Apple Pudding.—Pare and core six large apples, chop them very fine, and mix them with a pint of sifted Indian meal, two eggs, a table-spoonful of butter, and about a quart of milk. Bake in a buttered dish about two hours.

Baked Plum Pudding.—Seven table-spoonsful of sifted Indian meal, three pints of milk, seven eggs, half a pound of raisins, quarter of a pound of butter, and a quarter of a pound of sugar, a grated nutmeg, a table-spoonful of cinnamon, and half a tea-spoonful of salt.—Scald the milk, and while it is boiling stir in the meal---let it cool, stone and put in the raisins, the salt and spice. Beat the eggs well, and stir all together very hard. Put it in a buttered dish, and bake an hour and a half, good heat.-- *Ex.*

Muffins.---Scald a quart of Indian meal, and add a little salt. Beat four eggs, whites and yolks separately.---Stir them into the meal after it has become cold. If the batter should be very thick, put in a little water. Bake in buttered muffin rings.

Truth is a hardy plant, and when once firmly rooted it covers the ground so that error can scarce find root.

A warm heart requires a cool head. So a ship that carries a great deal of sail needs a first rate helmsman.

Dr. Franklin says: "He who rises late may trot all day, but never overtake his business."

Let that which is out of your power, be out of your care.

PROGRESS.

BY MISS PHŒBE CAREY.

Does the earth contain one spirit
Bowed despondent to the dust,
On the midnight of whose vision
Beams no star of hope and trust?
Let that soul but pause and ponder
On the works the past has done,
And an earnest, bright and glorious,
For the Future shall be won.

For the soul must feel the stirring
Of its destiny sublime,
Who but rightly views the present,
With its earnest heart and mind,
Toiling in the earthly vineyard
Many bands have found a place;
Some are nearing to the summit,---
Some are at the mountain's base.

"Progress" is the stirring watchword--
Cheers them upward to the height;
Canst thou pause and play the laggard,
With its glories full in sight?
And while fair and broad and glorious
In our vision we can see,
Still the future brightly stretching
Into far infinity.

Who shall tell what bond or barrier
To improvement heaven designed?
Who shall dare to fix the limits,
To the onward march of mind?
Only He, who into being
Called the unfathomed human soul,
He for whom the hymn of Progress
Through eternity shall roll!---*Ex.*

Source of Social Happiness.

As regards public happiness, statesmen and politicians too often forget that though good political institutions conduce to it, yet they are but one means to the attainment of this end, and that more than these are requisite to make individuals and nations happy. The cultivation of good will, kindness, humanity, and all the gentler affections, are far more influential in the promotion of private happiness than the justest balance of the political constitution can be; so that, though the value of civil and religious liberty is great, and has a large influence on national well-being, still it alone does not constitute happiness; and therefore, it seems to me, that those writers who devote their energies to the task of endeavoring to soften and improve the social affections, do incomparably more to promote the benefit of communities than those who have only in view what is more strictly designated "the public weal."—*Curtis on Health.*

How it is done.—The editor of the Mass. Plowman, speaking of the progress of improvement among the farmers of the Old Bay State, thus explains the manner in which it is done:—

"Farmers *read* vastly more on the subject of farming than they have ever done. The prejudices against written agriculture are fading away as fast as farmers of practical knowledge are coming forward and giving the results of their own experience. They hold meetings and reason together on various matters relating to their business, and none can fail to improve by intercourse and free converse on any branch of farming."

Corrections.—In paper of December 1st, p. 182, speaking of fruits in Southern Ohio, "Roules' Janette" should read *Rawles'*; and "Prior's Race" should read *Pryor's Red.*

Communication by F. R. Elliott, in next number.

THE HOME DOCTOR.

JUST PUBLISHED, a new and valuable book for every family in the country, and one that may be consulted with perfect safety. As its title page indicates, it is "THE HOME DOCTOR, or Family Manual, giving the causes, symptoms and Treatment of Diseases; with an account of the system while in health, and rules for preserving that state. Appended to which are recipes for making various medicines and articles of diet for the sick room. The whole written for general use and daily practice, by John B. Newman, M. D."

Also, accompanying this book, or separate, is "THE HERB BOOK, a book devoted exlusively to Herbs, giving their names, varieties, description, medical properties and doses, use, time of gathering, and many other directions very useful for every family to know, and written expresely for family use."

The Herb Book is devoted solely to *Popular Medical Botany*, and will furnish on that point all the desired information wanted for general use.

The two books are put up and bound together and contain 200 pages, price 25 cents, or sold separate at 12½ cents.

The symptoms of each disease are carefully given, so that one kind may be recognized from another, to prevent practising in the dark; also, the treatment, a sketch of general physiology, and rules for keeping in health, together with observations on their causes, means of avoiding deleterious influences, and such other remarks as are deemed appropriate, for *both male and female.*

The book has been written with great care, in a plain, simple, common-sense style, easily to be understood by every person, and by a practical physician and thorough botanist. We can recommend it with entire confidence, as being a work superior in all respects to any book of the kind ever published, at the price. Whether well or sick, such a book should be in every house as a safe and sure adviser in time of need; the directions given for persons in health and sickness cannot be too strictly attended to by all.

The price at which the book is sold is so low that every family may have a copy, and none should be without it.

The book is put up in paper binding, and can easily be sent by mail. Postage only 6½ cents to any part of the United States.

☞ Any person sending us *one dollar* by mail, and paying postage on the letter, shall have four copies sent him *free of postage.*

Agents Wanted to circulate this book. A rare chance is offered to make money.

Orders solicited by us, at No. 6 Exchange street.

FISHER & Co.,
Booksellers and Publishers.

Rochester, N. Y, January, 1848.

OSAGE ORANGE SEEDS AND PLANTS.
AT REDUCED PRICES!

THE Subscriber has on hand a supply of Osage Orange seed, warranted good, for sale at only $1 per quart.

As many persons have failed with the seeds, there is now an opportunity offered for procuring this very beautiful and desirable article for hedges with no risk or delay, and very little expense. One thousand plants will set 300 feet of hedge—full directions for planting, &c., will be furnished each purchaser. Orders should be sent early.

Columbus, O., Oct. 15, 1848. M. B. BATEHAM.

Agricultural Warehouse and Seed Store,

Cor. Washington and Exchange streets., Buffalo.

WE have opened an establishment at this place, and intend to keep constantly on hand at wholesale and retail, one of the most complete assortments of implements and seeds ever opened in this country, all kinds of implements will be tested upon our farm, before being recommended to the public. Our stock of seeds is large both of foreign and domestic kinds, and our foreign seeds are imported from one of the most reliable dealers in Europe. Consignments of clover and grass seeds are requested. Evergreens, Larch, and Fruit and ornamental trees furnished to order. Manufacturers of implements are requested to send us examples.

T. C. Peters & Bro.

November, 1848.

Dutch Bulbs and other Flower Roots.

I HAVE received, by late arrival, my annual importation of Bulbous and other Flower Roots, consisting of over two hundred choice varieties of double and single Hyacinths of all colors; Early and late double and single Tulips, sweet scented Tulips; Polyanthes Narcissus; Crown Imperials; Amaryllis, Double and single Anemone; Ranunculus'; Frittillaria's; Gladiolus; martagon Lillies; yellow, blue, white and purple Crocus; Iris Susiana Major, &c.—The above imported direct from one of the most celebrated Florists in Harlem, Holland—have been received in excellent condition, and are all, especially the Hyacinths very large, and well ripened bulbs.

Seed store, Fifth street, north side, between Main and Sycamore, *Cincinnati.*

November 25, 1848. H. HUXLEY.

☞ ALSO, a few quarts of fresh Pear seeds, for sale as above. Price $5 per quart.

The Markets.

Late English News has been favorable for the provision trade generally—especially beef and pork—but somewhat unfavorable for flour and grain.

Cincinnati, Dec. 29.—Hogs continue the leading article of trade—and the advance of prices during the past two weeks caused some excitement among dealers. Prices have ranged from 3,80 to 3,90 per 100 lbs; but a decline has since taken place, and quotations are 3,50 to 3,75. Beef Cattle continue in good demand—3,50@3,62 per 100 lbs. Flour brings 3,75@3,80 per bbl. Wheat 75 cts; Corn 28@30; Oats 25@28; Rye 50; Barly 55; Clover seed 3,50 per bushel. Butter for packers 11@12½ cts; Cheese for shipping 6½ cents per lb. Eggs 17@18 cts per dozen.

Zanesville, Dec. 27—Wheat 75; Flour $4@4,25.—Pork 2,55@2,87.

Mansfield, Dec. 27.—Flour $4; Wheat 72; Corn 25; Oats 23; Clover seed 3,00.

New York, Dec. 30.—No change in grain or flour markets. Pork has advanced a trifle. Steamer from England is now due.

COLUMBUS PRODUCE MARKET.

Corrected for the Ohio Cultivator, Jan. 1, 1849.

GRAIN.			Honey, strained	12½@	14
Wheat, ₱ bu,	75 @		POULTRY.		
Indian corn,	22 @	25	Turkeys, each,	37@50	
Oats,	19 @	20	Geese, "	25 @	37
PROVISIONS.			Ducks, "	10 @	12
Flour, retail, bbl,	400 @	4,25	Chickens, "	10 @	12
" 100 lbs	2,25 @		SUNDRIES.		
" Buckwheat.	2,00 @	2,25	Apples, bu.	25 @	37
Indian meal, bu	37 @	40	" dried,	50 @	
Hominy, quart,	3 @		Peaches, dried,	1,50 @	
Beef, hd qr	@		Potatoes,	62 @	75
" 100 lbs	2 50 @	3,00	Onions,	1,00 @	
" fore qr	2,00 @	2 50	White beans bu	1,00 @	
Pork, mess, bbl.	9.00 @	9.50	Hay, ton,	4,00 @	5,00
Hogs, ₱ 100 lbs,	2,50 @	2,75	Wood, hard c'rd	1,50 @	2,00
Hams, country lb,	5 @	6	Salt, bbl., fine	2.12½@	2,25
" city cured,	6 @	7	SEEDS.		
Lard, lb., ret,,	5 @	6½	Clover, bu.,	3.00 @	
" in kegs or bls.	@		Timothy,	1,50 @	2,00
Butter, best rolls,	10@	12½	Flax,	75 @	80
common,	9 @	10	ASHES.		
in kegs,	8 @	9	Pot, 100 lbs	3.50 @	4,00
Cheese,	5 @	6½	Pearl,	4,00 @	4.50
Eggs, dozen,	12 @	15	Wool, common,	18 @	20
Maple sugar, lb.	7 @		half bl'd,	20 @	23
molasses, gal.	@		full bl'd.	@	
Honey comb, lb,	10 @	12½			

NEW AND IMPROVED VOLUME OF

THE OHIO CULTIVATOR.

Devoted *to Agriculture, Horticulture, and Domestic and Rural Economy.*

Sixteen pages, *twice a month*, making a handsome volume of 340 pages, with title and index at the end of the year; illustrated with numerous engravings of improved farming Implements and Stock, plans of Buildings, Fences, &c., &c.

M. B. BATEHAM, Editor and Proprietor, *Columbus, Ohio.*

The fifth volume of the Ohio Cultivator commenced, January 1st, 1849. It is issued in *octavo* form, making sixteen pages each number, instead of eight as formerly, thus making the work more suitable for binding. It is also printed on a better quality of paper, and its appearance otherwise improved. A distinct Horticultural Department is now added, for which communications have been promised from a number of horticulturists in Ohio and elsewhere. The Housewife's Department will be continued, and it promises to be well filled with articles by talented female writers.

The Editor will continue to devote his best energies to the work; and he promises, if well sustained by the public, to make the coming volume better in all respects than either of the preceding ones. To the Farmers of Ohio, the Ohio Cultivator will be found of more practical value than any similar paper published east of the mountains; as the matter for its pages is written or selected with special reference to the climate, soil and farming of Ohio. The *market intelligence*, also, will be more recent and servicable, and in fact worth the full cost of subscription.

Farmers and friends of Agriculture! Let us make a vigorous and united effort in the cause of *improvement* the coming year!—The work has been well begun—many County Societies and a State Board of Agriculture have been organized under a favorable law for their encouragement; and it is in contemplation to hold a grand *State Fair* and perhaps organize a State Society next fall: but in order to do this in a manner that will be creditable to the great State of Ohio, it is necessary to secure more general co-operation on the part of the farmers. A larger number of them must have their minds awakened to the importance of the work, and better informed in regard to the means of its accomplishment. This can be done in no other way so effectually as by extending the circulation of the *Ohio Cultivator*.

At the late annual meeting of the Ohio State Board of Agriculture, the following resolution was adopted:

Resolved, That, inasmuch as Agricultural papers are found to be the greatest means of awakening interest in the minds of Farmers on the subject of Agricultural Improvement, this Board recommend to officers of Agricultural societies, and all persons interested in the advancement of Agriculture, to use their efforts to increase the circulation of such papers—especially of the *Ohio Cultivator*, published at the capital of our own State.

☞ *Now is the time to subscribe!*—begin with the new volume—and read during these long winter evenings.

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